Review articles
Modelling the influence of human behaviour on the spread of infectious diseases: a review
S. Funk, M. Salathé & V. A. A. Jansen

Research articles
A two-tiered model for simulating the ecological and evolutionary dynamics of rapidly evolving viruses, with an application to influenza
K. Koelle, P. Khatri, M. Kamradt & T. B. Kepler

Changing and shielded magnetic fields suppress c-Fos expression in the navigation circuit: input from the magnetosensory system contributes to the internal representation of space in a subterranean rodent

Laminar flow around corners triggers the formation of biofilm streamers
R. Rusconi, S. Lecuyer, L. Guglielmini & H. A. Stone

Evolutionary optimality in stochastic search problems
M. D. Preston, J. W. Pitchford & A. J. Wood

Synthesizing within-host and population-level selective pressures on viral populations: the impact of adaptive immunity on viral immune escape
I. Volkan, K. M. Pepin, J. O. Lloyd-Smith, J. R. Bansvaur & B. T. Grenfell

Ontogenetic development of migration: Lagrangian drift trajectories suggest a new paradigm for sea turtles
G. C. Huys, S. Fossette, K. A. Katselidis, P. Mariani & G. Schofield

Stance and swing phase costs in human walking
B. R. Umberger

Topological network alignment uncovers biological function and phylogeny
O. Kuchaiev, T. Milenkovic, V. Memisevic, W. Hayes & N. Przulj

The competitive adsorption of human proteins onto natural-based biomaterials
C. M. Alves, R. L. Reis & J. A. Hunt

Fractional rate of change of swim-bladder volume is reliably related to absolute depth during vertical displacements in teleost fish
G. K. Taylor, R. I. Holbrook & T. B. de Perera

Reports
The attachment strategy of English ivy: a complex mechanism acting on several hierarchical levels